

Response To Comments

A draft National Pollutant Discharge Elimination System (NPDES) permit for the City of Toppenish, Washington municipal sewage treatment facility was issued for public notice on March 12, 1997. The Public Notice initiated a 30-day public comment period. EPA received comment from Carroll Palmer, Deputy Director, Department of Natural Resources, Yakama Indian Nation, in a letter dated April 3, 1997. No other comments were received. The following summarizes the substantive comments and EPA's response.

Comment. Notification. The commentor stated that EPA met the minimum public notification regulations of 40 CFR 25.4 but that EPA did not meet the intent of the regulation and suggest that EPA directly notify the Wapato Irrigation Project, the US Bureau of Indian Affairs in Toppenish, the City of Toppenish, the Toppenish Review, and the Yakama Nation Review.

Response. EPA agrees that in future actions involving facilities within or near borders of the Yakama Nation we will notify the relevant irrigation project and the US Bureau of Indian Affairs in Toppenish. EPA did notify the City of Toppenish of this permit action and published the notice in the Toppenish Review. EPA will evaluate publishing future notices in the Yakama Nation Review but will have to consider budget issues of publishing notices in multiple newspapers on a case by case basis.

EPA has met the intent of the public notice requirements of 40 CFR 124.10. EPA sent the draft permit and fact sheet to 13 parties including federal, tribal, state, and environmental organizations. EPA also sent the public notice to 22 other parties who request that EPA provide notice of any permit issued by EPA in the State of Washington.

Comment. Applicability of State Standards. In a number of instances the commentor stated that the permit and the fact sheet needed additional clarification to the issue of what water quality standards apply in this instance and also requested clarification of the jurisdictional issues involved with this permit. The commentor wanted to clarify the fact that the State water quality standards do not apply directly to the Yakama Reservation.

Response. EPA agrees that additional clarification to the issue of which standards apply in this case and to the jurisdictional issue is warranted and is provided in this response to comment.

The City of Toppenish owns and operates a municipal sewage treatment facility which discharges into the Toppenish Drain. The facility and receiving water are within the boundaries of the Yakama Indian Reservation. The Washington State water quality standards only apply to waters of the State, and not to waters on Indian Reservations. As stated in their comment letter, "The Yakama Nation does not (and has never) recognize (d) that the State has any authority over the Reservation waters." EPA agrees that the State has no authority over Reservation waters. The

Yakama Nation Environmental Protection Program is currently working to establish regulations for point sources that discharge on the Yakama Indian Reservation and water quality standards for waters on the Reservation. The Yakama Nation has not yet adopted standards, therefore, there are technically no standards that apply to this portion of the Toppenish Drain. Furthermore, since Yakama Nation does not have delegated NPDES permit authority, EPA is the permitting authority on the Yakama Indian Reservation and the State has no permit regulatory responsibility on the Yakama Indian Reservation.

In situations where facilities are discharging into Indian Reservation waters, and the Indian Nation has not yet adopted water quality standards for that water body, it has been EPA's practice to apply adjacent or downstream standards to the water body for the purpose of developing permit limitations and conditions. In this permit, the State of Washington water quality standards were applied to the Toppenish Drain for the purpose of developing this permit.

Comment. Receiving Water Classification. The commentor stated that the Toppenish Drain is not a water body of the State of Washington and that the Washington State standards do not directly apply, similar to the preceding comment. More specifically, the commentor stated that the Yakama Nation has never confirmed that the Toppenish Drain is a Class A water body according to Washington State standards.

Response. EPA agrees that the State of Washington water quality standards do not directly apply to any Reservation waters. However, as discussed in the preceding response, downstream Washington water quality standards were used in this case due to the lack of adopted Yakama Nation standards.

As to the classification of the water body, the Toppenish Drain is not directly classified in the standards. The Washington regulations specify that all unclassified surface waters be classified as Class A. EPA therefore classified the Toppenish Drain as Class A. As stated in the fact sheet, EPA confirmed this interpretation with representatives from the State of Washington and the Yakama Nation. A Yakama Nation Environmental Protection Program Staff (phone call with Jannine Jennings, April 1996) confirmed this interpretation though no formal written response was requested nor was one provided by the Yakama Nation.

Comment. Receiving Water Flow. The commentor stated that the flow at Wilson Road is being used in lieu of measuring flow at the discharge, that the flow at Wilson Road is greater than at the discharge for most of the year, and questioned why the permit uses the Wilson Road flow.

Response. The permit uses both the Wilson Road data and the data near the facility. There were only 12 data points collected at the facility. There were an additional 30 data points at the Wilson road site. In order to increase the statistical strength of the data set, all 42 points were considered together. The commentor is correct that the Wilson Road site has a slightly higher

flow. Using only data collected near the facility would result in less water available for dilution and a correspondingly lower effluent limit. Chlorine is the only pollutant that involved a mixing zone to compute an effluent limitation. The draft permit effluent limit for chlorine, determined from the 42 data points, is already below the minimum level (lowest concentration that gives recognizable signals and an acceptable calibration point). Using a lower flow would result in a lower chlorine limit which would be even further below the minimum level and thus have no practical impact on the compliance level for the facility.

Comment. Mixing Zone. The commentor stated that the WAC regulation authorizing mixing zones do not directly apply on the Reservation. The commentor stated that the fact sheet discussed mixing zones but that there is no mixing zone established in the permit itself and that per WAC the permit must: include location and size of the mixing zone, and include a demonstration that the size of the mixing zone and the concentration of the pollutants have been minimized.

Response. EPA agrees that the WAC regulation authorizing mixing zones does not directly apply on the Yakama Reservation and only applies to waters of the State of Washington. The fact sheet was not clear to this fact. As discussed above, the Yakama Nation has not yet adopted water quality standards and thus for this permit, EPA applied the downstream standards (WAC).

As discussed in the fact sheet and demonstrated in Appendix 2, the permit does establish a mixing zone for total residual chlorine. The mixing zone utilized 25% of the stream flow for the chronic criteria and 2.5% of the stream flow for acute criteria. For chlorine limitations, these percentages were applied to low flow stream conditions (10th percentile flow) and thus establish a mixing zone based on percent of stream flow. EPA believes this methodology is conservative and minimized the size of the mixing zone. The fact sheet discusses the fact that hydrogeologic and other data necessary to model the length of the mixing zone was not available and resulting mixing zone dimensions from this mass balance and percent stream flow approach were not calculated.

Although the mixing zone is discussed in the fact sheet and used to develop permit limitations for total residual chlorine, the mixing zone is not described directly in the permit. This is due to the fact that the dimensions of the mixing zone are not an enforceable condition and therefore, are not described in the permit. The enforceable provision is the resultant chlorine limitation, which is listed in the permit.

Comment. Mixing Zone. The commentor referenced the fact sheet discussion regarding limited data and stated that “the Yakama Nation did volunteer to provide additional information as needed, but was not contacted.” The commentor also questioned whether the lack of information allowed for greater discharge concentrations than if more information was available.

Response. Yakama Nation was contacted for information and information was provided. A letter was received from Jannine Jennings of the Yakama Nation, following phone discussions with Ms. Jennings, initiated by EPA, on April 30, 1996. The letter enclosed all data known to have been collected by the Yakama Nation in the vicinity of the facility. The letter also referenced other sources of potential data including the USGS and Department of Ecology sources, which were investigated as discussed in the fact sheet. The Yakama Nation data was used in developing this permit. All the data cited in Appendix 1 of the fact sheet and referenced throughout the fact sheet was from the Yakama Nation Environmental Protection Program. Having more data could have resulted in more or less stringent limitations, dependant on what the additional data indicate.

Comment. Compliance Schedule. The commentor believes that “the interim effluent limit is excessively high”, and, “..according to Ecology’s permit writers, they have never allowed higher than 0.5 mg/l for an interim limit in a schedule of compliance.” The commentor recommended the interim limit be set no higher than 0.5 mg/l. The commentor also discussed the trade-off between lower chlorine limit and increased fecal coliform counts and that the fecal permit limit of 100 could be met with a 0.5 mg/l chlorine limit.

Response. EPA agrees that under typical conditions, a wastewater treatment plant can achieve adequate disinfection in order to meet the fecal coliform limit of 100 colonies/100 ml while also meeting a 0.5 mg/l chlorine limit. The commentor is also correct that Ecology often requires a 0.5 mg/l interim chlorine limit when a schedule of compliance is included in the permit within the State of Washington. EPA selected the 1.3 mg/l interim limit based on past performance at this particular facility, as discussed in the fact sheet. After further research into this issue, it was revealed that the Toppenish facility targets a low level of total coliform (2.2 organisms/100 ml) during the summer irrigation season, which results in high total residual chlorine levels during these months. This fecal target is based on a guideline for spray irrigation of food crops with treated wastewater which is contained in the document *Guidelines for Land Disposal of Treated Domestic Sewage Effluent in Washington State*, issued jointly by Ecology and the Department of Health (source: 1990 Ecology Report, Toppenish Sewage Treatment Plant Class II Inspection). In response to the comment, and in light of the spray irrigation guideline, the final permit will contain a seasonal chlorine limit for the interim period until the final chlorine limit is effective. During the “irrigation season” of May through October, the 1.3 mg/l limit shall apply as proposed in the draft permit. During the non-irrigation season, November through April, the 0.5 mg/l interim limit will apply, as suggested by the commentor. These limits will apply until the final chlorine limit becomes effective on January 1, 2002.

Comment. Compliance Schedule. The commentor stated that the permit should demonstrate that the discharger has evaluated the possibility of achieving water quality criteria through nonconstruction changes.

Response. It is EPA's experience that residual chlorine effluent limitations at or near the water quality criteria involve construction activity to address. Although the chlorine limitation can be met by removing the chlorination process from the facility, the result would be fecal coliform increases above permit limits. EPA believes construction is necessary in order to reduce chlorine levels while maintaining compliance with fecal coliform limits, therefore, a schedule of compliance remains in the final permit.

Comment. Compliance Schedule. The Yakama Nation should receive annual progress reports on the status of meeting the chlorine effluent limit from the facility.

Response. EPA agrees that the Yakama Nation should receive the annual progress reports on the status of meeting the chlorine effluent limit and will amend section I.D.2 of the final permit.

Comment. Total Ammonia an N. The commentor stated that the regulations requires that a mixing zone be as small as feasible and asked whether the permit is allowing for a full 300 foot mixing zone.

Response. The fact sheet discusses the available ammonia data and concludes that a permit limitation will not be established at this time and instead both effluent and in-stream monitoring requirements will be established so that ammonia limits can be evaluated in the next permit reissuance. Therefore, there is no mixing zone established for ammonia in this permit.

Comment. Water Quality Monitoring Program. The commentor stated that the location of the upstream monitoring station should "be more clearly identified as to its exact location in the permit".

Response. EPA agrees with the commentor that the location of the upstream monitoring station is important and will need to consider a variety of nonpoint sources that could influence the placement of the station. Due to the sensitivity of selecting the proper location and the need to consider a variety of local conditions, EPA purposely did not select a location in the permit and instead requires the permittee to submit a proposal which accounts for local factors. The final permit requires that the proposed location be approved by both EPA and the Yakama Nation Environmental Protection Program. The commentor will have approval authority over the monitoring site and an ability to assure that the local conditions are appropriately considered in the site selection process.

Comment. Water Quality Monitoring Program. The commentor stated that the fact sheet failed to include fecal coliform bacteria in the monitoring program despite the fact that fecal coliform is limited in the permit.

Response. Effluent monitoring in the draft permit includes fecal coliform bacteria but the ambient monitoring program does not. This is due to the fact that the ambient monitoring program was developed to gather data on metals and ammonia, as discussed in the fact sheet. Available monitoring in the drain indicates that fecal coliform exceeded criteria in all samples collected and therefore, there is no ability for the receiving water to dilute the effluent discharge. The water quality criteria for fecal coliform were incorporated in the permit as an end-of-pipe effluent limit. Since the fecal coliform in the drain is consistently well above water quality criteria, additional monitoring will not affect permit limits and is not included as a requirement in the ambient monitoring program.

Comment. Additional Monitoring Requirements. Regarding the Quality Assurance Plan the commentor states: "There should be a due date placed on this project, or can the facility develop the plan at its own leisure?"

Response. The draft and final permit requires the permittee to submit the quality assurance plan to EPA for review and approval within 180 days of the effective date of the permit.

Comment. Sludge Management Requirements. "The Yakama Nation should likewise be notified in the event of any major changes."

Response. EPA agrees and will amend section I.E.1.c. of the final permit accordingly.

Comment. Endangered Species. The commentor stated that the steelhead was proposed for listing in the Fall of 1996 and asks whether this proposed listing has any impact on ESA requirements for this permit. The commentor asked with what support and on what basis is the determination made that the discharge from the Wastewater Treatment plant will not affect listed species.

Response. EPA received a letter from the National Marine Fisheries Service (NMFS) on April 22, 1996, that stated that none of the listed endangered or threatened species under the NMFS jurisdiction are in the project area or immediately downstream from it. The letter states that none of the fish species that are presently proposed for listing under the Endangered Species Act are known to be present in the proposed action area.

EPA contacted NMFS to receive an update of the listing (phone call to Ben Meyer, NMFS, 5/1/97). The NMFS contact confirmed that the list as received in April 1996, is still current for the Toppenish permit project. The contact stated that no changes have taken place in the past year in the Yakima River System. The NMFS contact did comment that steelhead in the Upper Columbia and the Snake River System have been proposed for listing but that no changes have occurred in the Yakima project area and the April 1996 letter is still current.

The U.S. Fish and Wildlife Service (USFWS) indicated in a 1996 letter that the bald eagle, listed as threatened, may occur in the vicinity of the facility during the winter season. No other species are listed or proposed for listing as threatened or endangered in the vicinity of the facility. In the fact sheet EPA states that the discharge from the facility will not affect the listed species.

The USFWS lists the following general concerns to consider when assessing project impacts:

- “1. Level of use of the project area by listed species.
2. Effect of the project on listed species’ primary food stocks and foraging areas in all areas influenced by the project.
3. Impacts from project construction and implementation (e.g. increased noise levels, increased human activity and/or access, loss or degradation of habitat) which may result in disturbance to listed species and/or their avoidance of the project area.”

The potential impact of the Toppenish facility discharge to bald eagles is limited by the potential for exposure of eagles to the effluent, and the concentration of contaminants in the effluent. Potential routes of exposure consist of ingestion of water from the Toppenish Drain and ingestion of food exposed to the Drain water.

None of the contaminants are being released at concentrations that would likely result in adverse impacts to eagles that would ingest Drain water whose quality is influenced by the discharge. While some of the contaminants can potentially result in fish kills at concentrations that are much greater than those released by the Toppenish facility, these contaminants are not bioaccumulative, and would probably result in no impact to eagles that ingest fish that might be present in the Drain.

None of the threats to bald eagles or general concerns listed above identified by the USFWS can be associated with reissuance of the NPDES permit for the Toppenish facility. Therefore, one can conclude that the improved water quality and monitoring that will result from the renewal of this permit will not adversely impact the bald eagle.

Comment. Whole Effluent Toxicity Testing. “A new test should be conducted prior to the issuance of this permit” since seven years have elapsed since the last test.

Response. Results of toxicity testing in 1990 showed no toxicity. The effluent was not toxic to either Ceriodaphnia dubia or flathead minnow. Both organisms showed no observable effects concentrations at 100% effluent for both the acute and chronic portions of the test. Rainbow trout survival was 100% after 96 hours in effluent dechlorinated with sodium thiosulfate. There have been no known changes to the facility’s effluent that would lead to a suspicion of increased toxicity. The application indicates no industrial contribution to the facility. The time since the

last test is not reason enough to change the permit condition of requiring toxicity testing prior to expiration of the permit. No additional toxicity testing prior to issuance of this final permit is required.

Comment. State Water Quality Standards and State Certification. The commentor stated that the fact sheet should “.. state clearly that Section 401 applies but it is the responsibility of the EPA”.

Response. EPA agrees that Clean Water Act Section 401 certification does apply and is the responsibility of the EPA. Attached to this response to comments is a 401 certification document issued by EPA Region 10 which certifies this permit action.

Comment. Ambient Monitoring Requirements of the Permit. “Ambient monitoring data, and the DMRs should also be submitted to the Yakama Nation.”

Response. EPA agrees and section I.C.4. (Ambient monitoring) and II.C. Reporting of Monitoring Results of the final permit will be modified accordingly.

Comment. Reporting Requirements of the Permit. The Yakama Nation Environmental Protection Program request that they receive copies of the twenty-four hour notice of noncompliance. The commentor provided suggested language for the noncompliance requirements section of the permit: “The permittee shall report any noncompliance which may seriously endanger health or the environment as soon as possible, but no later than twenty-four hours from the time the permittee first became aware of the circumstances. The report shall be made to the Yakama Nation Environmental Protection Program at (509) 865-5121, and the State of Washington Emergency Response Team at (800)258-5900.”

Response. EPA agrees with this comment although the draft permit language adequately covers the conditions under which the permittee must report. EPA will add the contacts and phone numbers suggested by the commentor into the final permit at section II.G. Twenty-four Hour Notice of Noncompliance Reporting.

Comment. General Requirements. The commentor noted that the “State Law” section of the permittee that states that nothing in the permit shall relieve the permittee from any applicable state law should be changed to Tribal Law applicability.

Response. EPA agrees with this comment and will change section IV.P. of the final permit accordingly.

Comment. General Comments. The Yakama Nation request that there be a statement or description of the Yakama Nations current application for treatment as a State, for water quality standards.

Response. This has been done in this response to comments document under the second comment addressed above.